MAY 2 1 2008

Serial No.: 10/537,187 Case No.: 21208Y Page No.: 2

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended) A compound represented by formula I:

or a pharmaceutically acceptable salt or solvate thereof, wherein: one of a and b is 1 and the other is 0;

X is CH2;

R¹ is selected from the group consisting of:

- (1) C_{1-15} alkyl optionally substituted with up to five groups as follows: (a) 1-3 OH groups; (b) 1 oxo group; (c) 1-5 halo groups, up to a perhaloalkyl group; (d) 1-3 C_{1-6} alkoxy groups optionally substituted with up to five halo or a perhaloalkoxy, or up to 2 hydroxy or CO_2R^6 groups; (e) 1-2 CO_2R^6 groups and (f) 1-2 phenyl groups, each optionally substituted as follows: 1-5 halo groups, (2) 1-2 OH, CO_2R^6 , CN or $S(O)_pR^5$ groups, and (3) 1-2 C_{1-6} alkyl or alkoxy groups, each optionally substituted with 1-5 halo, up to perhaloalkyl, and 1-2 OH or CO_2R^6 groups; and
 - (2) aryl or heteroarylphenyl, optionally substituted as set forth below:
- (a) 1-3 hydroxy groups; (b) 1-5 halo groups; (c) 1-3 C_{1-15} alkyl or alkoxy groups, each optionally substituted with up to five halo and 1-2 hydroxy or CO_2R^6 groups; (d) 1-2 CO_2R^6 , CN, $S(O)_pR^5$ or $CONR^9R^{10}$ groups; (e) NR^9R^{10} ; (f) SCF_3 ; (g) phenyl, heteroaryl or O-phenyl, said group being optionally substituted with 1-5 halo groups, 1-2 OH, CO_2R^6 , CN or $S(O)_pR^5$ groups, and 1-2 C_{1-6} alkyl or alkoxy groups, each optionally substituted with 1-5 halo, up to perhaloalkyl, and 1-2 OH or CO_2R^6 groups;

R² represents H or C₁₋₆alkyl;

R³ represents H or F;

R⁴ is selected from the group consisting of H, F and OH;

or R³ and R⁴ are taken in combination and represent an oxo group;

R⁵ represents a C₁₋₁₀alkyl group;

 R^6 represents H or C_{1-10} alkyl, optionally substituted with OH, OC_{1-6} alkyl, CO_2H , CO_2C_{1-6} alkyl, and 1-3 halo groups;

R⁷ represents H, CO₂R⁶, C₁₋₆alkyl optionally substituted with OH, OC₁₋₆alkyl, CO₂R⁶ or 1-3 halo groups;

 R^8 and R^9 are independently selected from H and C_{1-6} alkyl; R^{10} is H or is independently selected from:

(a) C_{1-10} alkyl, optionally substituted with OH, OC_{1-6} alkyl, CO_2H , CO_2C_{1-6} alkyl, and 1-3 halo groups; (b) aryl or C_{1-6} alkaryl, each optionally substituted with 1-5 halos and 1-3 members selected from the group consisting of: CN, OH, C_{1-10} alkyl and OC_{1-10} alkyl, said alkyl and alkoxy being further optionally substituted with 1-5 halo groups up to perhalo; (c) heterocycle, or C_{1-6} alkyl-heterocycle, optionally substituted with 1-5 halo groups and 1-3 groups selected from: oxo, C_{1-10} alkyl and OC_{1-10} alkyl, said alkyl and alkoxy being further optionally substituted with 1-5 halo groups up to perhalo; and (d) heteroaryl or C_{1-6} alkyl-heteroaryl, optionally substituted with 1-5 halo groups and 1-3 groups selected from: C_{1-10} alkyl and OC_{1-10} alkyl, said alkyl and alkoxy being further optionally substituted with 1-5 halo groups up to perhalo;

R¹¹ is independently selected from the group consisting of:

(a) C₁₋₁₀alkyl, optionally substituted with OH, OC₁₋₆alkyl, CO₂H, CO₂C₁₋₆alkyl, and 1-3 halo groups; (b) aryl or C₁₋₆ alkaryl, each optionally substituted with 1-5 halos and 1-3 members selected from the group consisting of: CN, OH, C₁₋₁₀alkyl and OC₁₋₁₀ alkyl, said alkyl and alkoxy being further optionally substituted with 1-5 halo groups up to perhalo; (c) heterocycle, or C₁₋₆alkylheterocycle, optionally substituted with 1-5 halo groups and 1-3 groups selected from: oxo, C₁₋₁₀alkyl and OC₁₋₁₀ alkyl, said alkyl and alkoxy being further optionally substituted with 1-5 halo groups up to perhalo; and (d) heteroaryl or C₁₋₆alkyl-heteroaryl, optionally substituted with 1-5 halo groups and 1-3 groups selected from: C₁₋₁₀alkyl and OC₁₋₁₀ alkyl, said alkyl and alkoxy being further optionally substituted with 1-5 halo groups up to perhalo;

Y represents a 4 to 8 membered spirocarbocyclic ring,

said spirocarbocyclic ring being optionally substituted on either carbon or nitrogen
atoms with up to three groups independently selected as follows:

(a) 1-2 phenyl groups, each being optionally substituted with one to five groups independently selected from the group consisting of: (1) 1-3 hydroxy groups; (2) 1-5 halo groups;

(3) 1-3 C₁₋₈alkyl or alkoxy groups, each being further optionally substituted with 1-5 halo or 1-2 OH or CO₂R⁶ groups, and (4) 1-2 CO₂R⁶⁻; CN, S(O)_pR⁵, CONR⁹R¹⁰ or NO₂ groups;

(b) C₁₋₁₀ alkyl optionally substituted with 1-5 groups selected as follows: (i) 1-3 hydroxy groups; (ii) 1-5 halo groups up to perhalo; (iv) 1-3 C₁₋₁₀ alkoxy groups,

. . .

Serial No.: 10/537,187 Case No.: 21208Y Page No.: 4

optionally substituted with 1–5 halo groups up to perhalo, or 1–2 hydroxy or CO₂R⁶ groups; (v) 1–2 CO₂R⁶ groups; (vi) phenyl, optionally substituted with one to five groups independently selected from the group consisting of: (a) 1–3 hydroxy groups; (b) 1–5 halo groups; (c) 1–3 C_{1–6} alkyl or alkoxy groups, optionally substituted with 1–5 halo groups up to perhalo, or 1–2 hydroxy or CO₂R⁶ groups; (d) 1–2 CO₂R⁶; CN, S(O)_pR⁵, CONR⁹R¹⁰ or NO₂ groups; (e) 1–2 phenyl rings, each of which is optionally substituted as follows: 1–3 C_{1–10} alkyl or alkoxy groups; each being further optionally substituted with 1–5 halo up to perhalo, or 1–2 hydroxy or CO₂R⁶ groups;

said spirocarbocyclic or spiroheterocyclic ring being further optionally substituted on a carbon atom with a member selected from the group consisting of:

- (a) $NR^8 C(O) NR^9 R^{10}$; (b) $NR^8 CO_2 R^{11}$; (c) $NR^8 C(O) R^{11}$; (d) $NR^9 R^{10}$;
- (e) NR⁸SO₂R¹¹; (f) SO₂-NR⁹R¹⁰; (g) C(O)NR⁹R¹⁰ and (h) OC(O) NR⁹R¹⁰;

and when said ring contains a nitrogen atom, said ring being further optionally substituted on the nitrogen atom with a member selected from the group consisting of:

(a) $-C(O)NR^9R^{10}$; (b) $-CO_2R^{11}$; (c) $-C(O)R^{11}$; and (d) $-SO_2R^{11}$;

Y represents a spirocyclohexyl ring that is substituted with a C₁-4 alkyl group that is optionally substituted with a phenyl ring;

m and p are independently selected from 0, 1 and 2, and n is an integer from 0 to 6, when both m and n are zero, Z is selected from 5-tetrazolyl and 5-(2-oxo-1,3,4-oxadiazolyl) and when one of m and n is other than zero, Z is selected from the group consisting of: CO₂R⁶, with R⁶ as defined above, 5-tetrazolyl and 5-(2-oxo-1,3,4-oxadiazolyl).

Claim 2 (Currently Amended) A compound in accordance with claim 1 wherein: R¹ is selected from the group consisting of:

- (1) C_{1-6} alkyl optionally substituted with 1-3 groups selected from: OH, halo, C_{1-3} alkoxy, halo- C_{1-3} alkoxy and phenyl, said phenyl being optionally substituted with 1-3 halo groups, SO_2R^5 , and 1-2 C_{1-3} alkyl or alkoxy groups optionally substituted with 1-3 halo groups, and
- (2) arylphenyl optionally substituted with 1-3 halo groups; 1-2 C₁₋₃alkyl or alkoxy groups, each optionally substituted with 1-3 halo groups; -NR⁹R¹⁰ wherein R⁹ and R¹⁰ are H or methyl; SCF₃ and heteroaryl.

Claim 3 (Original) A compound in accordance with claim 2 wherein: R¹ represents phenyl optionally substituted with 1-2 groups selected from Br, Cl; trifluoromethyl and trifluoromethoxy.

Claims 4-7 (Cancelled)

Claim 8 (Currently Amended) A compound in accordance with claim 71 wherein: Y represents a spirocyclohexyl group substituted with a t-butyl group at the 4 position.

Claim 9 (Original) A compound in accordance with claim 1 wherein: R^2 is H or C_1 . 3alkyl.

Claim 10 (Original) A compound in accordance with claim 9 wherein: R² represents H.

Claim 11 (Original) A compound in accordance with claim 1 wherein: R⁷ represents H or methyl.

Claim 12 (Original) A compound in accordance with claim 11 wherein R⁷ represents H.

Claim 13 (Original) A compound in accordance with claim 1 wherein:

and m represent 0, and Z represents a 5-tetrazolyl group.

Claim 14 (Original) A compound in accordance with claim 1 wherein: m represents 0, n represents 2, and Z represents a CO_2R^6 group.

Claim 15 (Original) A compound in accordance with claim 1 wherein: m and n each represent 1, R³ represents OH, R⁴ represents H and Z represents a CO₂R⁶ group.

Claim 16 (Currently Amended) A compound in accordance with claim 1 wherein: R¹ is selected from the group consisting of:

- (1) C_{1-6} alkyl optionally substituted with 1-3 groups selected from: OH, halo, C_{1-3} alkoxy, halo- C_{1-3} alkoxy and phenyl, said phenyl being optionally substituted with 1-3 halo groups, SO_2R^5 , and 1-2 C_{1-3} alkyl or alkoxy groups optionally substituted with 1-3 halo groups, and
- (2) aryl optionally substituted with 1-3 halo groups; 1-2 C_{1-3} alkyl or alkoxy groups, each optionally substituted with 1-3 halo groups; -NR⁹R¹⁰ wherein R⁹ and R¹⁰ are H or methyl; SCF₃ and heteroaryl;

X represents CH₂;

one of a and b represent 1 and the other represents 0;

Y represents a spiroC₄₋₈cycloalkyl group or a 5-6 membered spiroheterocyclic group containing 1 N atom,

said ring being optionally substituted with a C_{1-6} alkyl group, which is optionally substituted with 1-3 halo groups or 1 Phenyl ring that is optionally substituted with 1-2 halo, 1-2 C_{1-3} alkyl or alkoxy groups, said alkyl and alkoxy substituents being further optionally substituted with 1-3 halo groups; spirocyclohexyl ring substituted with a C_{1-4} group that is optionally substituted with a phenyl ring;

R² is H or C₁₋₃alkyl; R⁷ represents H or methyl; m and n represent 0, and Z represents a 5-tetrazolyl group.

Claim 17 (Currently Amended) A compound in accordance with claim 1 wherein: R¹ is selected from the group consisting of:

(1) C_{1-6} alkyl optionally substituted with 1-3 groups selected from: OH, halo, C_{1-3} alkoxy, halo- C_{1-3} alkoxy and phenyl, said phenyl being optionally substituted with 1-3 halo groups, SO_2R^5 , and 1-2 C_{1-3} alkyl or alkoxy groups optionally substituted with 1-3 halo groups,

and

(2) <u>arylphenyl</u> optionally substituted with 1-3 halo groups; 1-2 C₁₋₃alkyl or alkoxy groups, each optionally substituted with 1-3 halo groups; -NR⁹R¹⁰ wherein R⁹ and R¹⁰ are H or methyl; SCF₃ and heteroaryl;

X represents CH₂;

one of a and b represents 1 and the other represents 0;

Y represents a spiroC_{4-s}eyeloalkyl group,

said ring being optionally substituted with a C_{1-6} -alkyl group, which is optionally substituted with 1-3 halo groups or 1 Phenyl ring that is optionally substituted with 1-2 halo, 1-2 C_{1-3} alkyl or alkoxy groups, said alkyl and alkoxy substituents being further optionally substituted with 1-3 halo groups; spirocyclohexyl optionally substituted with a C_{1-4} alkyl group that is optionally substituted with a phenyl ring;

R² is H or C_{1.3}alkyl;

R⁷ represents H or methyl;

m represents 0, n represents 2, and Z represents a CO₂R⁶ group.

Claim 18 (Previously Presented) A compound in accordance with claim 1 wherein: R¹ is selected from the group consisting of:

- (1) C_{1-6} alkyl optionally substituted with 1-3 groups selected from: OH, halo, C_{1-3} alkoxy, halo- C_{1-3} alkoxy and phenyl, said phenyl being optionally substituted with 1-3 halo groups, SO_2R^5 , and 1-2 C_{1-3} alkyl or alkoxy groups optionally substituted with 1-3 halo groups, and
- (2) aryl optionally substituted with 1-3 halo groups; 1-2 C₁₋₃alkyl or alkoxy groups, each optionally substituted with 1-3 halo groups; -NR⁹R¹⁰ wherein R⁹ and R¹⁰ are H or methyl; SCF₃ and heteroaryl;

X represents CH₂;

one of a and b represents 1 and the other represents 0;

Y represents a spiroC₄₋₈cycloalkyl group or a 5-6 membered spiroheterocyclic group containing 1 N atom,

said ring being optionally substituted with a C_{1-6} alkyl group, which is optionally substituted with 1-3 halo groups or 1 Phenyl ring that is optionally substituted with 1-2 halo, 1-2 C_{1-3} alkyl or alkoxy groups, said alkyl and alkoxy substituents being further optionally substituted with 1-3 halo groups;

 R^2 is H or C_{1-3} alkyl;

R⁷ represents H or methyl;

m and n each represent 1, R³ represents OH, R⁴ represents H and Z represents a CO₂R⁶ group.

31 300 TO 6 1 5

Claim 19 (Currently Amended) A compound in accordance with claim 1 selected from the following table:

TABLE 1				
	Compound	Compound		
	CF30 NH NH NN N	CF ₃ O OH OH		

TABLE 1						
	Compound		Compound			
	F T OH		The Contraction of the Contracti			
	H ₁ C CH ₄ CH CH		t-Bu No			
1 5			NH			
			но он			
· · ·		•	· · · · · · · · · · · · · · · · · · ·			
	t-Bu OCF ₃		H,C CH, N N N N N N N N N N N N N N N N N N N			
	OCF, HZ, Z					

or a pharmaceutically acceptable salt or solvate thereof.

Claim 20 (Original) A pharmaceutical composition comprising a compound in accordance with claim 1 in combination with a pharmaceutically acceptable carrier.

Claim 21 (Withdrawn) A method of treating type 2 diabetes mellitus in a mammalian patient in need of such treatment comprising administering to said patient a compound in accordance with claim 1 in an amount that is effective to treat said type 2 diabetes mellitus.